



US Army Corps  
of Engineers®

Engineer Research and  
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# Water Resources Data Base (WRDB)

## Description and Background:

The Water Resource Data Base (WRDB) is produced and maintained by TEC's Operations Division. The WRDB provides information on quality, quantity, and availability of water resources in areas of the world of interest to the Department of Defense (DoD). The WRDB is produced under DoD Directive 4705.1, which specifies for "the development of an improved, expanded and automated water resource intelligence data base for the rapid retrieval of selected data." TEC's water resource overlays are the primary data set populating the WRDB Geographic Information System (GIS); these are keyed to 1:250,000-scale Joint Operations Graphics maps and depict the location, quantity, quality and accessibility of existing water facilities, surface water supplies, and ground water resources.

*Digital Hydrologic Analysis Data (DHAD):* DHAD is a standard digital terrain analysis output of the WRDB. It is an online, interactive, digital representation of the water resource thematic overlays. DHAD feature and attribute data are encoded in the Feature Attribute Coding Catalog (FACC).

*WRDB Country Summaries:* Water resource information is also provided at a country or regional scale as a [Water Resources Areal Appraisal](#) or Water Resources Assessment or as part of the Military Capabilities Study or Terrain Analysis Engineering Review. This format often is more suitable for non-arid areas and for strategic planning purposes than the level of detail provided in the standard WRDB/DHAD output. Most of these studies are available online.

*WRDB Information Requests:* Surface water, ground water, and water facility information can be provided to users via a variety of methods (online, hardcopy, CD, etc.) to meet customer requirements. Special WRDB analyses, reports, and coverages can be provided or posted to the INTELINKS upon request.

## Key Capabilities:

OD developed an improved, expanded and automated water resources intelligence data base to assist commanders in making water support logistics decisions. The commercial-off-the-shelf GIS software used for the WRDB is ESRI's ARCGIS.

## Current Status:

More than 2,400 hardcopy water resource overlays (1:250,000 scale) have been completed; this coverage includes more than 80 percent of the U.S. Central Command area of responsibility (AOR) and partial coverage of the U.S. European Command AOR. To date, nearly half of the hardcopy overlays have been digitized into the WRDB GIS and are currently available online as DHAD. An additional 20% of the hardcopy overlays are available online as scanned images. Country or regional water studies are available online for nearly 40 countries. These are available on TEC's Intelink-S (<http://www.tec.army.smil.mil>) and Intelink-TS (<http://www.tec.ic.gov>) websites under "Products Available/Water Resources". An FOUO subset of the WRDB is planned for the TEC NIPRNET with PKI security.

## Point of Contact:

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